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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PWU, JEFFREY C

ART UNIT PAPER NUMBER

2143

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,643

Applicant(s)

BIRRELL ET AL.

Examiner

Jeffrey C. Pwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/14/05 Amendment/RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 15-18, 20-23, 28 and 44-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 15-18, 20-23, 28 and 44-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/05 has been entered.

Claim Rejections - 35 USC § 112^{1st}

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 45, 48, 49, and 52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure lacks clear written description in the description of a partnership agreement. It is unclear what is the "partnership" agreement in the claim among a plurality of computers. Furthermore, it is unclear how to act as backup partners to honor its backup partnership's back up data.

Claim Rejections - 35 USC § 112^{2nd}

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 45, 48, 49, and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite because it is unclear what is the partnership agreement in the claim.

6. Claims 1, 45, 48, 49, and 52 recite the limitation "other computers". There is insufficient antecedent basis for this limitation in the claim.

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is vague and indefinite because it is unclear what are the potential backup partners from among a plurality of computers. Claim 2 is also vague and indefinite because it is unclear what are the predetermined criteria in order to determine any partnership among a plurality of computers

8. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 is vague and indefinite because it is unclear how to negotiate the agreements

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between the plurality of computers based on either the predetermined requirements or the backup requirements.

9. Claim 16 recites the limitation "the backup partners" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 19 recites the limitation "the computer" in 18. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 20 recites the limitation "the other computer" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 21 recites the limitation " the new backup partner " in claim 20. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is vague and indefinite because it is unclear what are potential backup partners from among a plurality of computers. Claim 2 is also vague and indefinite because it is unclear what is a predictable and/or suitable time schedule for being on-line, and/or a suitable network bandwidth.

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14. Claim 28 recites the limitation " other backup partners " in claim 1. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is vague and indefinite because it is unclear what is a predetermined commitment period and that is longer than a grace period.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 1-4, 15-18, 20-23, 28 and 44-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhoj et al. (U.S. 6,304,892).

Bhoj et al. teaches claims :

1. A method for backing up data on a plurality of computers connected via a network, comprising:

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forming one or more partnerships (41 – “large enterprise”, 42 – “Enterprise”, 43 – “Outsource”) among the plurality of computers such that each computer in a partnership commits under an agreement (service level agreement or “SLA”) to store backup data received from one or more of its backup partners (31, 32, 33), whereby a first computer in each partnership assumes the task of storing backup data received from one or more other computers in the partnership and one or more of the other computers in the partnership assume the task of storing backup data received from the first computer; (service level agreement or SLA)

backing up data in accordance with each agreement (“col.7, lines 22-38 “Each of the SLAs is first converted into a contract specification (also referred to as contract) in order to be stored in and used by the respective one of the service management systems 31a-33a. A contract specification is derived from a SLA to indicate the service attributes that are meaningful for correct service behavior. The contract specification contains both the service attributes and the bounds within which the service attributes must stay in order for the service to behave in a desired manner. Attributes must both be quantifiable and measurable to be included in a contract specification. The conversion from the SLA to the contract specification can be done, for example, by human being or using knowing language conversion technology. In one embodiment, the SLAs are converted into the corresponding contract specifications manually. In this case, the contract specifications are written using some kinds of source languages”); and

periodically verifying that previously backed up data is being retained by the computers committed to act as backup partners in accordance with each agreement. (it is part of the service contract agreement or guarantee to periodically verify that previously backed up data is being

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retained by the computers committed to act as backup partners in accordance with each agreement; col.7, lines 38-35)

2. The method of claim 1, further comprising: selecting potential backup partners from among the plurality computers based on predetermined criteria. (see outsourcing agreements and/or contracts; 210)

3. The method of claim 1, further comprising: negotiating the agreements between the plurality of computers based on predetermined requirements, including backup requirements. (see outsourcing agreements and/or contracts; 210)

4. The method of claim 1, wherein the plurality of computers administer a distributed cooperative backing up of data in the absence of central control. (31a, 200)

15. The method of claim 1, wherein each of the plurality of computers has a storage, the storage being periodically scanned to find data to be backed up and identify data previously backed up that no longer needs to be backed up, the data to be backed up being retrieved from the storage for a next periodic backup. (300)

16. The method of claim 1, wherein the verifying that previously backed up data is retained by the backup partners includes monitoring the backup partners, and for any one of the backup partners being monitored, selecting a block of data stored at the monitored backup partner,

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requesting the block of data from the monitored backup partner, and receiving from the monitored backup partner and checking the block of data to determine if the block of data represents a corresponding block of previously backed up data. (200; 355 – “evaluate contract results”; 210, 300)

17. The method of claim 16, wherein the block is selected randomly. (357)

18. The method of claim 16, wherein the block is selected using a protocol to produce a number that corresponds to the selected block and that is controlled by at least two backup partners (31, 33)

20. The method of claim 1, further comprising: selecting another computer connected via the network to be a new backup partner if it is determined that a backup partner has reneged by not retaining the previously backed up data; negotiating and, if an agreement is reached, forming a partnership with the other computer, accepting the other computer as the new backup partner. (see outsourcing agreements and/or contracts; 210)

21. The method of claim 20, wherein selecting another computer to be the new backup partner includes determining if there are sufficient backup partners for backing up the data, and searching for the other computer based on predetermined criteria including one or both of geographic separation and system diversity. (260, 300, 310, 301, 302)

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22. The method of claim 20, wherein if after accepting the other computer as the new backup partner it is determined that the backup partners are insufficient in number for backing up the data, the selecting, negotiating and forming backup partnership with yet another computer are repeated, the determining, selecting, negotiating and forming backup partnership being repeated until the number of backup partners is sufficient. (it is inherent part of the business method in outsourcing agreements and/or contracts)

23. The method of claim 2, wherein selecting computers as potential backup partners includes determining if there are sufficient backup partners for backing up the data, and searching for computers based on the predetermined criteria that includes one or both of geographic separation and system diversity. (it is inherent part of the business method of outsourcing agreements and/or contracts)

28. The method of claim 1, wherein each of the backup partners has a recent copy of a list of its backup partners' other backup partners. (32 further outsource some of its service to another data service system)

30. The method of claim 1, wherein the agreements are respectively negotiated between the plurality of computers such that in each partnership each computer commits to avoid making or honoring data restoration request for a predetermined commitment period that is longer than a grace period, wherein the grace period for a backup partner of a computer starts to run if it is determined that the backup partner has failed to respond to such computer verifying that the

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backup partner is retaining the previously backed up data or to prove to such computer that it is retaining the previously other backup partners (see outsourcing agreements and/or contracts; 210)

44. The method of claim 1, wherein the data being backed up is file contents. (411)

Claims 45-58 are similarly rejected as in claims 1-4, 15,18 and 20-23.

Allowable Subject Matter

18. Claim 19, 24-27 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

19. Applicant's arguments with respect to claims 1-4, 15-18, 20-23, 28, and 44-52 have been considered but are moot in view of the new ground(s) of rejection.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



2/16/06

JEFFREY PWU
PRIMARY EXAMINER